



2870 Gateway Oaks Drive, Suite 150  
Sacramento, CA 95833

Job Name: Muscoy OU Remedial Action  
WA No.: 016-RARA-09J5  
Project Location: San Bernardino, CA  
URS Project No.: 18600069.01030

## MUSCOY 19<sup>th</sup> STREET PLANT/ENCANTO PARK TECHNICAL MEETING MINUTES

Date: 02/16/06  
Time From: 1030 - 1600

U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Contract No. 68-W-98-225

### Meeting Attendees:

- ☐ Kim Hoang/USEPA; Glenn Bruck/USEPA
- ☐ Dennis Bane/URS; Dwayne Deutscher/URS; Adam Harvey/URS
- ☐ Stacey Aldstadt/SBMWD (morning only); Robin Ohama/SBMWD; Bill Bryden/SBMWD; Lana Kennerly/SBMWD
- ☐ Mark Eisen/Secor
- ☐ Bob Kemmerle/E2; Tom Perina/CH2M Hill

Meeting Topics: (Note, in order to accommodate schedules of various attendees, the order of topics varied from that in the agenda. However, in order to maintain the standard meeting minute format established historically and to match the agenda, the following notes maintain the standard agenda format and order. In other words, the topics presented in these meeting minutes are not in the actual order they were discussed in the meeting).

### ☐ Project Construction Status

- Encanto Park Booster Pump Station
  - The SixCENSE instrument power supply has been tested satisfactorily. The subcontractor plans to finalize the power supply installation on 17 February.
  - The electrical final inspection will be conducted concurrent with the SixCENSE testing and training.
- Treatment Plant
  - Attachment A, listing the exceptions from the final inspection on 27 July 2005, are complete and were accepted by attendees.
  - A monthly performance evaluation was conducted on 16 February 2006 by Adam Harvey and Dwayne Deutscher/URS; Bob Kemmerle/E2; and Mike Lowe and Mike Garland/SBMWD. Items identified include: D/P 4B "under"; remote RTU backplane requires replacement; 4B 1" cap tether; and 11A 1" cap missing.
- Extraction Wells
  - Attachment A, listing the exceptions from the final inspection, are complete and were accepted by attendees. The lexan window repairs will be handled as routine maintenance by SBMWD.
- Monitoring Wells
  - Attachment A, listing the exceptions from the final inspection, are complete and were accepted by attendees.

### ☐ Instrumentation/SCADA

- Treatment Plant –
  - RTU near GAC vessels requires backplane replacement. Dave Solomona notified Adam on 2/1/06 that he installed a added a card in the RTU to count pulses for flowmeter 5, to restore totalizer display on the OIT. He said a new backplane or repair to backplane is needed to restore the RTU to full original condition.
  - As noted in the monthly inspection, D/P transmitter 4B is displaying "under". Electrical subcontractor to investigate.



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Date: 02/16/06  
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### Meeting Topics Continued:

- Encanto Park –
  - Subcontractor to complete installation and testing of SixCENSE power supply.
  - The electrical final inspection will be scheduled once the SixCENSE is confirmed operational.
- Monitoring Wells –
  - Bill stated that a communications fix has been proof-of concept tested. The city will use high speed data handling/modem system. The plan is to install the system in the next 1 to 3 months.
- Extraction Well Status
  - No updates.
- Project Issues/Schedules
  - Pump test data is complete and can be taken off the agenda.
  - URS is proceeding with the Colima well abandonment and replacement. Drilling will commence on 24 February.
  - Lana will review and update the deliverable distribution list.
  - For the Cost and Performance report, URS will need contractor costs for the EWs and the SCADA system from SBMWD.
  - URS will need as-built drawings from SBMWD for the reports (for EWs, SCADA, façade houses).
  - Bill stated that the SBMWD well site report will include the EW and the façade house reports.
  - Kim stated that Dennis is doing the EW/MW report following the Newmark example. She stated that the EW equipment must be covered in a report.
  - URS needs to make a list of information needed from SBMWD for the EW/MW report (installation info, etc.)
  - Per Kim, in the RA report, a good summary of each system should be included with references to details in the appendix.
  - Dwayne said the URS final RA report should be submitted by 1 November in order to allow 60 days for review and meet the 31 December end of POP.
  - Kim noted that URS can get everything done on the Cost and Performance and RA reports, except the performance component.
  - Bill asked about when equipment was jockeyed between EW-108 and EW-112. Kim said to write the report as a final as-built report.
  - URS needs to reword the deliverable schedule so that it fits within this calendar year.
  - Bill noted that SBMWD wants to review anything that EPA will post on the internet (security concerns).
- One-Year Operations
  - The monthly report format was discussed. Adam distributed an updated outling based on comments received from EPA.
  - Mark noted that for flow performance, a three-month rolling average is used and compared to maintenance - allowed required flow (8.75 maintenance days allowed per quarter by the CD). Method is described in the OSAP and SOW attachment No. 2.
  - Kim asked which report will include all of the pump test results. Mark to discuss with Dennis.



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### Meeting Topics Continued:

- Kim would like to include SCADA status in the monthly reports. This information to be provided by SBMWD.
- The monthly report should include description of correction to efficiency problem with EW-109. This information to be provided by SBMWD.
- SBMWD (Dave) will produce a top-down SCADA summary report and send to URS. This will be incorporated into the monthly status report that URS produces.
- Kim would like a SCADA section in the RA report. Bill requested that it refer to internal SBMWD documents, similar to the O&M manual.
- Kim said that URS will generate a list of information needed from the city. This will be forwarded to the city and we will discuss it at the next meeting.
  
- ❑ Quality Control Team
  - Tom Perina requested EW-109 pump test results. Mark to provide again if needed.
  
- ❑ Community Relations
  - None.
  
- ❑ Other
  - A reporting/deliverable schedule meeting will be held in Sacramento on 8 March 2006, 10:30 a.m. with Kim and URS.
  
- ❑ Capture Zone Data Discussion
  - Dennis presented an overview of the latest data and the "plume definition and inhibition performance evaluation approach" discussed with SBMWD, URS, and EPA on 15 February 2006. Highlights:
    - Reviewed the figure using November 2005 data, including Darby well water level data (from videolog of well-one time occurrence).
    - Plume definition proposed: 5 ppb and 2.5 ppb.
    - Stacey noted that SBMWD accepts this for now, given that there will be discussion in March 2006 with lawyers and managers. The city is concerned that plume definition is very integral to performance criteria analysis.
    - Dennis noted that November 2005 data will be used for plume definition to analyze capture for the period July 2005 to April 2006. This is acceptable since the plume moves so slowly (about 2 to 3 feet per day).
    - MW136A at depth of about 420 feet is probably not acceptable as a shallow well and does not respond like the other MWs during pump tests, thus it is taken out of the shallow well set.
    - Glenn noted that this discussion is only related to shallow zone. There is concern regarding the shallow and intermediate connection. The relationship between the shallow and intermediate zones needs to be examined.
    - Mark noted that MW-136A may work with the intermediate zone.
    - Bob noted concern about the 8.2 ppb at Garner Park B well.
    - For the inhibition performance, a transect will be drawn from the 2.5 ppb to the 2.5 ppb line across (perpendicular to) the plume axis.
    - Dennis asked how the pre-November 2005 capture analysis should be performed (July to October 2005). One option would be to use Darby as a pseudo point and assume the same gradient as current data indicates.
    - Dennis noted that the February to July 2006 evaluations will be more robust with the new Colima well in place.



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- Mark noted that SBMWD will also ramp up to full water production during February to July 2006.
- Dennis noted that it may be worth getting another video to get a water level at Darby in February (approximately \$1,500 cost).
- Kim said to generate another capture zone diagram without the text using the November data with the new decisions to review.
- Kim noted that a maximum reasonable scenario would be potentially valuable.
- Mark said that on the East side there is little data available. EW-108A is not screened as a safety valve for capture. It is also the area between Muscoy and Newmark-very complex. The data is maximized and we must work with what we have.
- Bill noted that Dennis has to create reports in retrospect. We must have a consensus to look at past data to move forward. This analysis and methodology looks reasonable and it is time to move forward.
- Kim noted we must take the most reasonable approach, but she is still concerned about uncertainty with the analysis using the given data set.
- Mark said there are two parts: plume and water levels.
- Dennis noted there is a qualitative uncertainty, not a quantitative uncertainty.
- Dennis gave an sensitivity analysis example where water level was varied and there was very little effect on capture zone.
- Mark noted that the Colima well is needed for concentration and water level data.
- Dennis said he could use worst case historical data (highest concentrations measured at each well) to draw another plume map and analyze for capture.
- Dennis said he would use the new methodology and the November 2005 data to produce a new diagram for review prior to proceeding with the capture zone report.
- Kim requested that the 6-month progress report include different scenarios and the monthly report include only the above methodology.
- Glenn asked if the city was comfortable with capture near EW-108.
- Mark said this would be discussed in March.
- Dennis to produce the capture zone analysis figures and a technical meeting will be held to discuss the results.

### □ Next Meeting

- The next Technical meeting is scheduled for 20 April 2006; 10:00 a.m.; in San Bernardino.

*The minutes of this meeting represent the writer's understanding of the events as discussed. Should an attendees understanding differ, please contact Adam Harvey at (916) 679-2002 or adam\_harvey@urscorp.com. The minutes contained herein will stand if not corrected within ten (10) days of this writing.*